

REMARKS

This Amendment is filed in response to the Office Action mailed Sept. 6, 2005, and in connection with a Petition to Withdraw Holding of Abandonment Based on Failure to Receive Office Action. As explained in the Petition, the Applicant has only recently learned of the existence of the Office Action, and accordingly now responds thereto. All objections and rejections are respectfully traversed.

Claims 1-32 are now pending in the case.

Claims 2, 10, 20, 25 have been amended.

Claims 30-32 have been added.

Claim Rejection - 35 U.S.C. §112

At paragraphs 1-2 of the Office Action, claims 3, 10, 20, and 25 were rejected under 35 U.S.C. §112, second paragraph. The Applicant believes the Examiner intended claim 2, rather than claim 3, since claims 2, 10, 20 and 25 all used the phrase “in at least substantial part” which the Examiner maintained is indefinite.

Accordingly, the Applicant has amended claims 2, 10, 20, and 25 and believes they are now allowable.

Claim Rejection - 35 U.S.C. §102

At paragraphs 3-4 of the Office Action, claims 1, 3, 6, 11-14, 17, 23, 24, and 29 were rejected under 35 U.S.C. §102(a) as anticipated by Varghese et al., U.S. Patent No. 6,560,236 titled “Virtual Lans” (hereinafter Varghese).

The Applicant’s claim 1, representative in part of the other rejected claims, sets forth:

1. A method for use by an intermediate network device having a plurality of interfaces for forwarding network packets among the interfaces, one or more of the interfaces being associated with one or more Virtual Local Area Network (VLAN) designations, the method comprising the steps of:
 - mapping each VLAN designation to a site identifier;
 - receiving on an inbound interface *a packet having a site-local unicast destination address*;
 - identifying the VLAN designation associated with the received packet;
 - utilizing the identified VLAN designation to retrieve the site identifier to which the VLAN designation is mapped*;
 - creating a modified destination address by embedding the retrieved site identifier into the site-local unicast destination address*; and
 - rendering a forwarding decision for the received packet based on the modified destination address.

Varghese discloses an IPv4 technique for dividing a large LAN into a number of virtual LANs (VLANs) interconnected by network devices. *See* col. 1, lines 61-63. Each network has a plurality of ports, and these ports are divided into groups associated with particular VLANs. *See* col. 2, lines 2-13. Upon receipt of a unicast packet having a destination address located in one of the VLANs, the network device determines through which port the destination address is reachable, and forwards the unicast packet through that port. *See* col. 3, lines 3-9.

In one example, Varghese discloses a bridge (*see* Fig. 2, 112) having two link (*see* Fig. 2, 114(1)) in a first VLAN, and two links (*see* Fig. 2, 114(2)) in second VLAN. *See* col. 4, lines 59-64. To configure such an arrangement, a user assigns the ports connected to the links in the first VLAN (*see* Fig. 4, ports 8, 12) a first VlanId, and the ports connected to the links in the second VLAN (*see* Fig. 4, ports 9, 15) a second VlanId. *See* col. 4, line 65 to col. 5, line 6. When packets are sent on the ports, the associated VlanId is embedded in the packets, either in “a specially created VlanId field” or in some other non-essential field that may be overwritten, such as a SSAP field. *See* col. 5, lines 62-65 and col. 6, lines 7-20.

In short Varghese discloses a classical VLAN arrangement using IPv4.

The Applicant respectfully urges that Varghese is silent concerning the Applicant's claimed ***"a packet having a site-local unicast destination address"*** and ***"utilizing the identified VLAN designation to retrieve the site identifier to which the VLAN designation is mapped"*** and ***"creating a modified destination address by embedding the retrieved site identifier into the site-local unicast destination address."***

First, Varghese lacks any suggestion of the Applicant's claimed ***packet having a site-local unicast destination address*** as Varghese only discusses packets having a unicast destination address. *See* Varghese col. 3, lines 3-9. Indeed, in the Office Action, the Examiner acknowledges this fact but argues a "unicast packet with a destination address is equivalent ...to a packet having a site-local unicast destination address." The Applicant respectfully urges that such an interpretation is incorrect as it effectively reads out all meaning from the term ***site-local***. While a claim is to be given its broadest reasonable interpretation, each claim term should be accorded some meaning. The term ***site-local*** has a specific meaning defined in IPv6. Specifically, the Applicant describes in the specification at page 4, lines 7-14 (emphasis added):

IPv6 also defines two types of local use or scoped unicast addresses: link-local unicast addresses and site-local unicast addresses. In contrast to the Aggregatable Global Unicast Addresses described above, link-local and site-local addresses are not globally unique. Instead, link-local addresses are unique only on a single link, ***while site-local addresses are unique only within a given site.*** Link-local addresses were developed to support auto-configuration, ***while site-local addresses were developed, at least in part, to allow computer networks that are not connected to the global Internet to nonetheless use IPv6 address schemes. A site, which is not rigorously defined in IPv6, is typically intended to cover a region of topology that belongs to a single organization and that is located within a particular geographic location.*** A link typically refers to a LAN or a bridged network.

Accordingly a ***site-local unicast destination address*** is not suggested by the ordinary unicast destination address discussed in Varghese.

Second, Varghese lacks any suggestion of the Applicant's claimed *utilizing the identified VLAN designation to retrieve the site identifier to which the VLAN designation is mapped*. Instead, Varghese simply describes mapping a VlanId, which represent a particular VLAN, to ports. *See* col. 4, line 65 to col. 5, line 6. In the Office Action, the Examiner equates the claimed *site identifier* with Varghese's VlanId. The Applicant respectfully urges them far different. The term "site identifier" relates to the IPv6 concept of "sites", which are discussed at page 4, lines 7-14 of the specification, among other places. Indeed the Applicant discusses both VLAN IDs and *site identifiers* in the Specification, making clear they are very different. *See, e.g.* page 12, lines 28-30.

Third, Varghese lacks any suggestion of the Applicant's claimed *creating a modified destination address by embedding the retrieved site identifier into the site-local unicast destination address*. Specifically, Varghese make no suggestion of storing any type of identifier, much less a site identifier, *into* a destination address field itself. Instead, Varghese describes storing a Vlanid either in "a specially created VlanId field" or in some other non-essential field, overwriting the non-essential data. *See* Varghese col. 5, lines 62-65 and col. 6, lines 7-20. Varghese goes on to describe that a non-essential field is one that may be reconstructed from data in other fields, for example the SSAP field of the Data Link header. The Applicant respectfully urges that this is far different than a destination address field, which clearly is an essential field that is not generally "reconstructed" from other fields. Accordingly, Varghese lacks any disclosure of storing a site identifier *into* a destination address field itself.

Accordingly, the Applicant respectfully urges that Varghese is legally insufficient to make obvious the present claims under 35 U.S.C. §103 because of the absence of the Applicant's claimed novel "*a packet having a site-local unicast destination address*" and "*utilizing the identified VLAN designation to retrieve the site identifier to which the VLAN designation is mapped*" and "*creating a modified destination address by embedding the retrieved site identifier into the site-local unicast destination address.*"

At paragraphs 5-6 of the Office Action, claims 2, 20, 21, 25, and 26 were rejected under 35 U.S.C. §102(a) as anticipated by Varghese in view of Flanders et al., U.S. Patent No. 6,172,980 (hereinafter Flanders)

The Applicant notes that claims 2, 20, 21, 25, and 26 are dependent claims that depend from independent claims that are believed to be allowable. Accordingly, these dependent claims are also believed to be allowable.

In the event that the Examiner deems personal contact desirable in disposition of this case, the Examiner is encouraged to call the undersigned attorney at (617) 951-2500.


All independent claims are believed to be in condition for allowance.

All dependent claims are believed to be dependent from allowable independent claims.

The Applicant respectfully solicits favorable action.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,


James A. Blanchette
Reg. No. 51,477
CESARI AND MCKENNA, LLP
88 Black Falcon Avenue
Boston, MA 02210-2414
(617) 951-2500